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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Rice

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APPEAL BRIEF

Applicant submits the following Appeal Brief pursuant to 37 C.F.R. §41.37 not more than two months after the Patent Office received the Notice of Appeal (June 20, 2005). Enclosed is check number 15685 in the amount of $250 to cover the requisite fee under 37 C.F.R. §41.20(b)(2). No further fees or charges should be required or due. However, if any additional fees or charges are required for entry of this Brief, the Commissioner is authorized to charge the fees to Deposit Account No. 18-1167.

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(1) REAL PARTY IN INTEREST

The real party in interest is Charles Rice, inventor of the present invention.

(2) RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences to the best of Applicant's knowledge.

(3) STATUS OF CLAIMS

The present application has a total of forty (40) claims numbered 1-40, all of which stand rejected. Claims 1-31 were originally filed with the application. Claims 32-40 were added during the course of prosecution. Applicant appeals the rejection of claims 1-40.

(4) STATUS OF AMENDMENTS

All amendments have been entered to the best of Applicant's knowledge.

(5) SUMMARY OF CLAIMED SUBJECT MATTER

The present invention is a tube-forming device that forms notches, cuts, or perforations, for example, on opposing sides of a tubular work piece. The present invention operates on first and second sides of the tubular work piece without having to reposition the tubular work piece, or remove the tubular work piece from the tool. *Spec.*, pg. 1, ll. 1-3.

The tube-forming device comprises a work piece holder to hold the tubular work piece, a tool that is insertable into an end of the work piece, a tool holder to hold the tool, and a dual action rotating cam assembly to alternately drive the tool in first and second directions to engage the tool with first and second sides of the work piece. *Spec.*, pg. 3, ll. 15-24. The work piece holder may comprise a fixed die block assembly having a die block and one or more interchangeable dies. The die block includes an opening to receive the one or more interchangeable dies. The dies may be in the form of sleeves, for example, each having an inner diameter sized to receive a tubular work piece of a predefined outer circumference.

Spec., pg. 3, ln. 25 – pg. 4, ln. 17. A cutting edge at one end of the sleeve cooperates with the tool to shear material from the work piece. *Spec.*, pg. 4, ll. 13-15; Figures 4, 7.

In one embodiment, the tool comprises a shear or punch shaped to form a notch or other shape in the end of the tubular work piece. In other embodiments, the tool comprises a piercing tool that perforates the tubular work piece. Regardless of the type of operation the tool performs, however, the tool is secured to a tool holder such as a carrier block that is slidably mounted in the die block assembly. The tool is inserted into an end of the tubular work piece, and the dual-action rotating cam assembly moves the tool to notch opposing sides of the tubular work piece. *Spec.*, pg. 5, ll. 1-12; Figure 5.

The dual-action rotating cam assembly may comprise, for example, a cam that rotates on a shaft. The cam rotates on the shaft to drive the carrier block, and thus, the tool, in a linearly reciprocating manner to form the notches or perforations in opposing sides of the tubular work piece. Alternatively, the dual-action rotating cam assembly may comprise first and second rotating cams disposed on a common shaft. The first and second cams are offset with respect to one another such that they drive the carrier block and the tool in the linearly reciprocating manner. *Spec.*, pg. 5, ln. 24 – pg. 6, ln. 7.

Regardless of its physical configuration, the dual-action rotating cam assembly functions to drive the tube-forming device in three phases. Particularly, a user places the tubular work piece into the tube-forming device such that the tool is inserted into the end of the work piece. In the first phase of the tool cycle, the dual-action rotating cam assembly drives the tool in a first direction. The tool contacts an interior of the tubular work piece and forms a first notch by shearing off material from the tubular work piece. In the second phase of a tool cycle, the rotating cams drive the tool in a second, opposite direction. The tool contacts the opposite side of the interior of the tubular work piece to form a second notch by shearing off material from the tubular work piece. During a third phase of the tool cycle, the rotating cam assembly, and the

tool, is idle. This allows the user to remove the work piece and insert a new work piece. *Spec.*, pg. 5, ll. 17-23; pg. 5, ln. 24 – pg. 6, ln. 25; Figures 9A-9D.

(6) GROUNDS OF REJECTION

The Examiner rejected independent claims 1, 15, 30, and 32 under 35 U.S.C. §102(b) as being anticipated by the patent to Lin (U.S. Patent No. 5,609,081; hereinafter "Lin").

The Examiner further rejected claims 1 and 15 under 35 U.S.C. §103(a) as being unpatentable over the patent to Vernacchio (U.S. Patent No. 4,986,154; hereinafter "Vernacchio") in view of the patent to Tseng (U.S. Patent No. 6,269,721; hereinafter "Tseng").

(7) ARGUMENTS RELATING TO THE REJECTIONS OF CLAIMS 1, 15, 30, AND 32.

A. Lin fails to anticipate claim 1 under § 102(b).

Claim 1 is directed to a tube-forming device having a tool that engages a tubular work piece using a two-phased approach. For reference, claim 1 appears below.

> 1. A tube-forming device comprising:
> a) a work piece holder to receive a tubular work piece;
> b) a tool insertable into an end of the tubular work piece held by the work piece holder;
> c) a tool holder to receive the tool and movable in first and second directions;
> d) a first rotating cam to drive the tool holder in the first direction during a first phase of a tool cycle to engage the tool with a first side of the work piece; and
> e) a second rotating cam driven synchronously with the first rotating cam to drive the tool holder in a second direction during a second phase of the tool cycle to engage the tool with the second side of the work piece.

Lin discloses a portable tube-cutting device. In Lin, a user inserts a round tube into the device. A cutter blade (i.e., a tool) disposed within the interior of the device cuts the tube at a predetermined point along its length. *Lin*, col. 2, ll. 25-37. However, the teachings of Lin deviate markedly from the claimed invention. Most notably, Lin does not teach the requisite two-phased

approach. Particularly, the cutter blade of Lin does not move in first and second directions to engage first and second sides of a tubular work piece during first and second phases of a tool cycle, respectively. Rather, the disclosed cutter blade engages the exterior sidewall of the tube only when the cutter blade moves in a first direction. "By revolving the hand wheel (60, see FIG. 3A), thereby moving the transmission gear jacket (40), the cutter blade (30) will be driven down into the tube (92) to make the cut." *Lin*, col. 2, ll. 33-36; Figure 1 (emphasis added). This is the only time the cutter blade of Lin engages the tube. In the second direction, the tool moves upwardly away from the tube without engaging the tube. "[A]s the hand wheel (60) is revolved backwards, the sliding block (50) and cutter blade (30) will be directed by the gear to move upwards away from the robe. *Lin*, col. 4, ll. 10-19; Figure 1. Lin does not teach that the cutter blade engages the tube when moving in the second direction because there is no need for the cutter blade to engage the tube in the second direction – the cut is already complete.

Additionally, Lin does not disclose, "a tool insertable into an end of the tubular work piece held by the work piece holder." The cutter blades of Lin move "linearly up and down with [a] sliding block." *Lin*, col. 3, ll. 10-12. As such, the cutter blade of Lin engages and contacts the exterior sidewall of the tube between the ends of the tube. Figure 1 of Lin evidences this fact. Specifically, the ends of the tube that being cut lie outside of the device, while the cutter blades making the cut are wholly contained inside of the device. Indeed, the cutter blades of Lin are neither capable of, nor intended to be, inserted into the end of the tube as recited by claim 1, and Lin never suggests that they are.

Anticipation under §102 requires that a single piece of prior art disclose every element of a claim exactly as claimed. *In re Bond*, 910 F.2d 831, 323 (Fed. Cir. 1990). The patent to Lin plainly fails to meet this legal bar. Lin does not teach the requisite two-phased approach to form the tube. Additionally, Lin does not teach that the cutter blade is insertable into an end of the tubular work piece. Because Lin fails to teach each element of claim 1, Lin fails to anticipate claim 1 under §102.

B. Lin fails to anticipate claim 15 under § 102(b).

Claim 15 is also directed to a tube-forming device having a tool that engages the tubular work piece using the two-phased approach. For reference, claim 15 appears below.

15. A tube-forming device comprising:
    a) a work piece holder to receive a tubular work piece;
    b) a tool insertable into an end of the tubular work piece held by the work piece holder;
    c) a tool holder to receive the tool and movable in first and second directions; and
    d) a dual action rotating cam assembly to drive the tool holder in a first direction during a first phase of a tool cycle to engage the tool with a first side of the work piece, and to drive the tool holder in a second direction during a second phase of the tool cycle to engage the tool with a second side of the work piece.

Claim 15 calls out a "tool insertable into an end of the tubular work piece." Claim 15 also calls out "a dual action rotating cam assembly to drive the tool holder in first and second directions to engage the tool with first and second sides of the tubular work piece during first and second phases of a tool cycle." Thus, claim 15 contains language similar to that of claim 1. Therefore, for the reasons stated above, the patent to Lin fails to anticipate claim 15 under §102.

C. Lin fails to anticipate claim 30 under § 102(b).

Claim 30 is directed to a method of forming an end of a tubular work piece. For reference, claim 30 appears below.

30. A method of forming the end of a tubular work piece comprising:
    a) inserting a work piece into a work piece holder such that the work piece inserts over a tool;
    b) rotating a dual action cam assembly to reciprocate the tool during a tool cycle;
    c) wherein during a first phase of the tool cycle, the tool is driven in a first direction by the cam assembly to engage a first side of the tubular work piece; and
    d) wherein during a second phase of the tool cycle, the tool is driven in a second direction by the cam assembly to engage a second side of the tubular work piece.

Claim 30 recites, "inserting a work piece into a work piece holder such that the work piece inserts over a tool." Thus, claim 30 requires that the tool fit inside the end of the tubular work piece. Additionally, claim 30 also calls out a cam assembly that drives the tool in the first and second directions to engage first and second sides of the work piece during first and second phases of a tool cycle, respectively. For reasons similar to those stated above with respect to claim 1, the patent to Lin fails to anticipate claim 30 under §102.

D. Lin fails to anticipate claim 32 under §102(b).

Claim 32 is directed to a tube-forming device. For reference, claim 30 appears below.

32. A tube-forming device comprising:
    a) a work piece holder to receive a tubular work piece;
    b) a tool insertable into an end of the tubular work piece held by the work piece holder;
    c) a tool holder to receive the tool and movable in first and second directions; and
    d) a rotating cam assembly to drive the tool holder in first and second directions during first and second phases of a tool cycle.

Claim 32 recites, "a tool insertable into an end of the tubular work piece ... [and] ... a rotating cam assembly to drive the tool holder in first and second directions during first and second phases of a tool cycle." For reasons similar to those stated above, the cutter blade of Lin is not capable of being inserted into the end of the tube. Moreover, Lin fails to teach a rotating cam assembly that drives a tool holder holding the tool in first and second directions

during first and second phases of a tool cycle, respectively. Therefore, the patent to Lin fails to anticipate claim 32 under §102.

E. Vernacchio and Tseng, alone or in combination, fail to render claim 1 obvious under § 103(a).

Vernacchio discloses a tool-cutting device having a punch. In Vernacchio, the punch engages an interior side of the tube, and shears a portion of the tube to make a cut. To make a second cut, an operator must remove the tube from the device, and reinsert the tube such that the punch again contacts the opposite interior side of the tube. *Vernacchio*, col. 3, ll. 24-49. The punch and a collar that locks to the end of the tube include a row of markings that assist the user in aligning the tube to make the second cut. *Vernacchio*, col. 3, ll. 16-20.

Tseng discloses an electric paper punch having a series of horizontally aligned eccentric wheels. Each wheel rotates to drive a corresponding punch pin downwardly to punch through a first side of one or more sheets of paper. Once the pins are through the paper, the wheels rotate in a reverse direction to retract the pins from the newly formed holes. *Tseng*, col. 2, ln. 43 – col. 3, ln. 5.

Claim 1 recites, "a first rotating cam to drive the tool holder in the first direction during a first phase of a tool cycle to engage the tool with a first side of the work piece ... [and] ...a second rotating cam driven synchronously with the first rotating cam to drive the tool holder in a second direction during a second phase of the tool cycle to engage the tool with the second side of the work piece." The Examiner admits that Vernacchio does not teach or suggest these elements. However, the Examiner relies on Tseng in an attempt to correct this deficiency.

Tseng does not teach first and second rotating cams to drive a tool holder in first and second directions to engage first and second sides of a work piece (i.e., paper) with a tool. Rather, Tseng engages a first side of the paper in a first direction only. "The punch pin 34 and

the connecting module 26 are driven forward to punch paper in the paper slot 36 when the eccentric wheel 30 is rotated forward within the wheel groove 38." *Tseng*, col. 2, ln. 66 – col. 3, ln. 2. Once the holes are formed, the pins simply retract back through the holes to return to their original position. "Conversely, when the eccentric wheel 30 is rotated backward, the arc-shaped wall 40 is pushed backward and the connecting module 26 and the punch pin 34 are moved away from the paper slot 36." *Tseng*, col. 3, ll. 2-5. It is unquestionable that the fundamental concept of Tseng is to create holes in paper. As such, there is no "second side" for the punch pins to engage once the holes are formed.

Additionally, Tseng discloses a plurality of eccentric wheels and a plurality of punch pins. Each individual punch pin is slidably contained within its own punch module, and driven by its own individual eccentric wheel. That is, each eccentric wheel moves an individual punch pin in both a downward direction to form a hole, and an upward direction to retract the punch pin from the hole. Claim 1, in contrast, recites that both the first and second cams drive a single tool holder that holds a single tool. Thus, both the first and second cams drive the tool of claim 1. A single eccentric wheel that drives a punch pin – individually from the remaining punch pins - does not teach or suggest a first cam and a second cam to drive a single tool holder in both a first direction and a second direction.

Thus, neither Vernacchio nor Tseng teach or suggest, alone or in combination, "a first rotating cam to drive the tool holder in the first direction during a first phase of a tool cycle to engage the tool with a first side of the work piece ... [and] ...a second rotating cam driven synchronously with the first rotating cam to drive the tool holder in a second direction during a second phase of the tool cycle to engage the tool with the second side of the work piece." As such, the §103 rejection of claim 1 fails as a matter of law.

The §103 rejection also fails because the Examiner has failed to put forth a legally sufficient motivation to combine the cited references. Specifically, the Examiner cites Vernacchio for its disclosure of a work piece holder, a tool, and a tool holder. The Examiner

than cites Tseng for its disclosure of an eccentric wheel. The Examiner finalizes the rejection simply by stating, "It would have been obvious ... to provide a cam as taught by Tseng to drive a tool holder in the Vernacchio's tube-forming device." That is the extent to which the Examiner addresses the motivation for combining Vernacchio and Tseng. This motivation falls far short of the *legally sufficient* reasoning required by law, and as such, is insufficient with which to establish a *prima facie* case of obviousness.

Motivation, as articulated by the Federal Circuit, requires that there be some desirability or advantage gained in making the combination, and further, that desirability or advantage must be apparent to one skilled in the art. An observation that something would have been obvious to one skilled in the art will *never* satisfy the legal requirements of motivation because it says nothing about the desirability to do so. "The mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification." *In re Gordon.* 733 F.2d 900, 902, 221 U.S.P.Q. 1125 (Fed. Cir. 1984) (emphasis added). The Examiner never articulates a rationale that suggests to one skilled in the art that it would be desirable or advantageous to modify Vernacchio with Tseng, and certainly never points to any concrete evidence of record to support such an assertion.

The Examiner's position simply appears to be that because Tseng discloses eccentric wheels used in an electric paper punch, it would be obvious to put them in a tube-cutting device. However, the fact that Tseng uses eccentric wheels means nothing. It certainly does not mean that there is a motivation, suggestion, or desirability to place them in a tube-forming device. The Examiner has simply identified some of the parts of Applicant's claimed invention in a plurality of references. However, the mere identification of the combination of parts in a plurality of references, by itself, does not render Applicant's invention obvious. If it were, then many inventions could instantly be rendered obvious, effectively eviscerating 35 U.S.C. §103 as well as the most of the body of case law that interprets it.

> As this court has stated, 'virtually all [inventions] are combinations of old elements.' (citations omitted) Therefore, an examiner may often find every element of a claimed invention in the prior art. If identification of each claimed element were sufficient to negate patentability, very few patents would ever issue. Furthermore, rejecting patents solely by finding prior art corollaries for the claimed elements would permit an examiner to use the claimed invention itself as a blueprint for piecing together elements in the prior art to defeat the patentability of the claimed invention. Such an approach would be 'an illogical and inappropriate process by which to determine patentability' (citations omitted).

In re Rouffet, 149 F3d 1350, 47 U.S.P.Q.2d 1453 (Fed. Cir. 1998).

It is interesting to note that the background section of Applicant's specification specifically mentions the type of device disclosed by Vernacchio, and identifies the disadvantages inherent with its use. *Spec.*, pg. 1, ln. 21 – pg. 2, ln. 2. Thus, the Vernacchio device presents *exactly* the same problem that Applicant's invention seeks to solve. Therefore, it appears that the Examiner has simply dissected Applicant's claims, searched through the art for each element, and engaged in impermissible hindsight reconstruction using Applicant's own disclosure as a blueprint.

Vernacchio discloses a device that cuts tubes for welding. Tseng discloses an electric paper punch. Neither reference contains any motivation, suggestion, or desire that would lead one skilled in the art to make the alleged combination. The only place that contains a motivation is Applicant's own disclosure and, as the Board is well aware, this constitutes impermissible hindsight reconstruction.

Accordingly, for the foregoing reasons, neither Vernnachio nor Tseng teach or suggest, alone or in combination, claim 1. As such, the § 103 rejection of claim 1 must fail.

F. Vernacchio and Tseng, alone or in combination, fail to render claim 15 obvious under § 103(a).

Claim 15 calls out a dual action rotating cam assembly that drives a tool holder in first and second directions during first and second phases of a tool cycle, respectively. In the first

direction (during the first phase of a tool cycle), the tool engages a first side of the work piece. In the second direction (during the second phase of a tool cycle), the tool engages a second side of the work piece. For reasons similar to those stated above, neither Vernacchio nor Tseng teach or suggest, alone or in combination, this element of claim 15. As such, the §103 rejection of claim 15 necessarily fails.

Conclusion

For the reasons set forth above, the Examiner has failed to establish that the reference to Lin anticipates any of claims 1, 15, 30, and 32 under §102(b). In addition, the Examiner has also failed to establish a *prima facie* case of obviousness under §103 with respect to claims 1, and 15. Therefore, all claims 1-40 being appealed herein are patentable over the cited art. Applicant respectfully requests that the Board overturn the Examiner's rejections.

Respectfully submitted,

COATS & BENNETT, P.L.L.C.

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(8) CLAIMS APPENDIX

1. A tube-forming device comprising:

a) a work piece holder to receive a tubular work piece;

b) a tool insertable into an end of the tubular work piece held by the work piece holder;

c) a tool holder to receive the tool and movable in first and second directions;

d) a first rotating cam to drive the tool holder in the first direction during a first phase of a tool cycle to engage the tool with a first side of the work piece; and

e) a second rotating cam driven synchronously with the first rotating cam to drive the tool holder in a second direction during a second phase of the tool cycle to engage the tool with the second side of the work piece.

2. The tube-forming device of claim 1 wherein the work piece holder comprises a die block having an opening therein to receive the work piece.

3. The tube-forming device of claim 2 wherein the work piece holder further comprises an interchangeable die insertable into the opening in the die block.

4. The tube-forming device of claim 3 wherein the die comprises a sleeve that surrounds the work piece.

5. The tube-forming device of claim 4 wherein the die further comprises a cutting edge that cooperates with the tool to shear the work piece.

6. The tube-forming device of claim 1 wherein the tool comprises a shear.

7. The tube-forming device of claim 6 wherein the shear is shaped to notch the end of the tubular work piece.

8. The tube-forming device of claim 1 wherein the tool comprises a piercing tool to form an opening in the work piece.

9. The tube-forming device of claim 1 further comprising a plurality of interchangeable tools.

10. The tube-forming device of claim 1 wherein the tool holder comprises a reciprocating carrier block having an opening therein to receive the tool.

11. The tube-forming device of claim 10 wherein the carrier block has first and second cam openings therein adapted to receive the first and second cams respectively.

12. The tube-forming device of claim 11 wherein the first cam opening has a first cam surface engaged by the first cam during the first phase of the tool cycle to move the carrier block in the first direction and wherein the second cam opening has a second cam surface engaged by the second cam during the second phase of the tool cycle to move the carrier block in the second direction.

13. The tube-forming device of claim 10 further comprising biasing means to bias the carrier block to a neutral position in which the tool is centered with respect to the work piece.

14. The tube-forming device of claim 13 wherein the biasing means comprises at least one spring that presses against the carrier block.

15. A tube-forming device comprising:

a) a work piece holder to receive a tubular work piece;

b) a tool insertable into an end of the tubular work piece held by the work piece holder;

c) a tool holder to receive the tool and movable in first and second directions; and

d) a dual action rotating cam assembly to drive the tool holder in a first direction during a first phase of a tool cycle to engage the tool with a first side of the work piece, and to drive the tool holder in a second direction during a second phase of the tool cycle to engage the tool with a second side of the work piece.

16. The tube-forming device of claim 15 wherein the work piece holder comprises a die block having an opening therein to receive the work piece.

17. The tube-forming device of claim 16 wherein the work piece holder further comprises an interchangeable die insertable into the opening in the die block.

18. The tube-forming device of claim 17 wherein the die comprises a sleeve that surrounds the work piece.

19. The tube-forming device of claim 18 wherein the die further comprises a cutting edge that cooperates with the tool to shear the work piece.

20. The tube-forming device of claim 15 wherein the tool comprises a shear.

21. The tube-forming device of claim 20 wherein the shear is shaped to notch the end of the work piece.

22. The tube-forming device of claim 15 wherein the tool comprises a piercing tool to form an opening in the work piece.

23. The tube-forming device of claim 15 further comprising a plurality of interchangeable tools.

24. The tube-forming device of claim 15 wherein the tool holder comprises a reciprocating carrier block having an opening therein to receive the tool.

25. The tube-forming device of claim 24 wherein the carrier block has first and second cam openings therein adapted to receive first and second rotating cams respectively.

26. The tube-forming device of claim 25 wherein the first cam opening has a first cam surface engaged by the first rotating cam during a first phase of the tool cycle to move the carrier block in a first direction and wherein the second cam opening has a second cam surface engaged by the second rotating cam during a second phase of the tool cycle to move the carrier block in a second direction.

27. The tube-forming device of claim 15 further comprising biasing means to bias the carrier block to a neutral position in which the tool is centered with respect to the work piece.

28. The tube-forming device of claim 27 wherein the biasing means comprises at least one spring that presses against the carrier block.

29. The tube-forming device of claim 15 wherein the dual action rotating cam assembly comprises a first rotating cam to drive the tool holder in the first direction during the first phase of the tool cycle to engage the tool with the first side of the work piece and a second rotating cam to drive the tool holder in the second direction during the second phase of the tool cycle to engage the tool with the second side of the work piece.

30. A method of forming the end of a tubular work piece comprising:

a) inserting a work piece into a work piece holder such that the work piece inserts over a tool;

b) rotating a dual action cam assembly to reciprocate the tool during a tool cycle;

c) wherein during a first phase of the tool cycle, the tool is driven in a first direction by the cam assembly to engage a first side of the tubular work piece; and

d) wherein during a second phase of the tool cycle, the tool is driven in a second direction by the cam assembly to engage a second side of the tubular work piece.

31. The method of claim 30 wherein the tool is idle during a third phase of the tool cycle to allow a work piece to be inserted into the work piece holder.

32. A tube-forming device comprising:

a) a work piece holder to receive a tubular work piece;

b) a tool insertable into an end of the tubular work piece held by the work piece holder;

c) a tool holder to receive the tool and movable in first and second directions; and

d) a rotating cam assembly to drive the tool holder in first and second directions during first and second phases of a tool cycle.

33. The device of claim 32 wherein the rotating cam assembly comprises first and second rotating cams.

34. The device of claim 33 wherein the first and second rotating cams rotate about the same axis.

35. The device of claim 33 wherein the first and second rotating cams are disposed on a common shaft.

36. The device of claim 32 wherein the rotating cam assembly drives the tool holder during a first phase, a second phase, and a third phase of a tool cycle.

37. The device of claim 36 wherein the rotating cam assembly is idle during the third phase of the tool cycle.

38. The device of claim 33 wherein the first and second cams are stacked along a common axis of rotation.

39. The device of claim 38 wherein the first cam includes a first lobe that contacts a first surface, and the second cam includes a second lobe that contacts a second surface.

40. The device of claim 32 wherein the rotating cam assembly comprises a rotating cam having first and second lobes that contact first and second surfaces, respectively.

(9) EVIDENCE APPENDIX

Attached find Exhibits 1 and 2 with further evidence.

(10) RELATED PROCEEDINGS APPENDIX

There are no related proceedings.